Amendment Under 37 CFR §1.111 Marco GENTILE et al.

Serial No.: 08/894,733

Group Art Unit: 1614 Examiner: Phyllis G. Spivack

August 27, 1998

**REMARKS** 

Claim 1 has been amended to recite the term "properties" in the plural and the transition

phrase "comprising", as suggested in the Office Action. Other changes are the correction of the

phrase "an inert gas atmosphere" and the recitation that the solution is being kept away from

light. The recitation that the solution is being kept away from light is supported in the

description, in particular page 6, line 13.

Claims 1-10 are under consideration in the present application. Claims 1-10 are directed

to a pharmaceutical composition with anti-inflammatory and analgesic properties comprising an

alkylammonium salt of a 2-arylpropionic acid selected from the group consisting of ketoprofen,

ibuprofen, naproxen, tiaprofenic acid, with the following additional characteristics:

- osmolarity between 270 and 310 mOsm/kg;

- pH between 7.0 and 7.5;

- no preservatives or supporting substances;

- preparation and storage in an inert gas atmosphere and away from light.

Claim 1 was objected to in the Office Action because of minor informalities.

Reconsideration and withdrawal of the objections is respectfully requested in view of the

corrections to claim 1 as suggested in the Office Action.

Claims 1-10 were rejected under 35 U.S.C. §103(a) as obvious over Bosone et al. (WO

94/20449). Bosone is commonly assigned with the present application and names one inventor

who is also named in the present application (Mr. Gaetano Clavenna). Bosone is cited in the

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International Search Report and also on page 6 of the specification of the present application.

According to the Office Action, Bosone allegedly teaches the parenteral administration of

compositions comprising ketoprofen in racemic and enantiomeric form with anti-inflammatory

and analgesic properties. It is asserted in the Office Action that the application of the teaching

in Bosone to the other compounds of the Markush group in claim 1 would have been obvious

in view of the similarity in structure and pharmacological activity, and that the osmolarity, pH,

absence of preservatives, and use of inert gas would have been an obvious selection of optimal

conditions through routine experimentation.

The rejection is respectfully traversed for the following reasons.

It is submitted that the claimed compositions are not obvious because a person of ordinary

skill in the art at the time the invention was made would have considered the presence of at least

a preservative as necessary in compositions such as those suggested in Bosone. The only

reference to pharmaceutical compositions in <u>Bosone</u> is a statement that "the salts of the invention

may be suitably mixed with pharmaceutically acceptable excipients and formulated in a suitable

manner for parenteral administration" (page 9, line 28 of Bosone). This description in Bosone

clearly refers to a possible pharmaceutical composition formulated in a manner known in the art,

with no novel characteristics except the active compound disclosed in **Bosone**. Thus, to a person

of ordinary skill in the art at the time the present invention was made, the presence or absence

of preservatives would not have been "parameters well within the purview of those skilled in the

art" as alleged in the Office Action, because the addition of preservatives or co-solvents up to

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a quantity of about 2.5 % by weight is of usual and routine practice in parenteral formulations.

Moreover, the practice of adding a preservative would have been considered particularly

necessary by a person of the art because the pharmaceutical compositions in Bosone contain

active compounds which are known to undergo degradation. In support thereof, the Applicants

submit copies of four journal articles documenting the photodegradation of active compounds

such as those disclosed in Bosone. In view of the above, the suggestion in Bosone of

compositions "formulated in a suitable manner for parenteral administration" would have been,

for a person of ordinary skill, a teaching that the compositions must contain a preservative in

order to avoid the degradation of the active compounds.

In contrast, an important improvement of the claimed compositions is that, in the absence

of alcohols to solubilize the possible degradation products of ketoprofen compounds, the patients

have a precise information about the quality of the composition. If the active principle in the

composition is altered, the aspect of the composition is changed and the patient is advised of the

alteration.

In further support of the above, a Declaration under Rule 1.132 by Mr. Clavenna, who

is named as an inventor in Bosone and in the present application, is submitted concurrently

herewith. The Declaration includes a report on comparative tests performed on a claimed

composition without preservatives and the same compositions including preservatives. The test

results in the Declaration show in particular the advantages of the claimed compositions without

preservatives over compositions of the prior art containing preservatives as in Bosone, as

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presented above. In addition, the Declaration contains a statement by Mr. Clavenna to the effect

that the teaching of "pharmaceutically acceptable excipients" in Bosone includes preservative

substances.

In conclusion, the invention as claimed is not obvious over **Bosone**, and the invention as

claimed is thus patentable. It is believed that the claims are in allowable condition and a notice

to that effect is earnestly requested.

In the event there is, in the Examiner's opinion, any outstanding issue and such issue may

be resolved by means of a telephone interview, the Examiner is respectfully requested to contact

the undersigned attorney at the telephone number listed below.

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In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of the response period. Please charge the fee for such extension and any other fees which may be required to our Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures: Declaration under Rule 1.132 by Mr. Clavenna

Journal of Photochemistry and Photobiology 104 (1997) 119-121;

60 (1994) 96-101; 57 (1993) 486-490; 46 (1987) 991-996 Photoderm. Photoimmun. Photomed. (1991) 8(5) 218-221 Journal of Pharmaceutical Sciences 81 (1992) 181-182